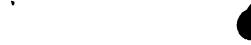


What is claimed is:

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- 1. A method for depositing a method of depositing a seed layer comprising the step of disposing on a substrate having a non-conductive layer and apertures of $\leq 1~\mu m$ a layer comprising one or more conductive polymers..
- 2. The method of claim 1 wherein the non-conductive layer is selected from a dielectric layer or a barrier layer.
- 3. The method of claim 2 wherein the dielectric layer comprises one or more of silicon dioxide, fluorinated silicon dioxide, organopolysilica materials, or organic dielectric materials.
- 4. The method of claim 2 wherein the barrier layer is selected from tantalum, tantalum nitride, titanium, titanium nitride, tungsten, tungsten nitride, molybdenum, molybdenum nitride, cobalt or cobalt nitride.
- 5. The method of claim 1 wherein the one or more conductive polymers are selected from polyaniline, polyacetylene, polypyrrole, polythiophene or graphite.
- 6. The method of claim 4 wherein the one or more of polyaniline, polyacetylene, polypyrrole or polythiophene are substituted.
 - 7. The method of claim 1 wherein the apertures are less than or equal to 5 μm .
- 8. A method for depositing a metal layer on a substrate comprising the steps of: disposing on a substrate having a non-conductive layer and apertures of $\leq 1~\mu m$ a layer comprising one or more conductive polymers; contacting the substrate with a metal electroplating bath; and subjecting the substrate to a current density for a period of time sufficient to deposit a metal layer on the conductive layer.
- 9. The method of claim 8 wherein the non-conductive layer is selected from a dielectric layer or a barrier layer.
- 10. The method of claim 9 wherein the dielectric layer comprises one or more of silicon dioxide, fluorinated silicon dioxide, organopolysilica materials, or organic dielectric materials.
- 11. The method of claim 9 wherein the barrier layer is selected from tantalum, tantalum nitride, titanium, titanium nitride, tungsten, tungsten nitride, molybdenum, molybdenum nitride, cobalt or cobalt nitride.



- 12. The method of claim 8 wherein the one or more conductive polymers are selected from polyaniline, polyacetylene, polypyrrole, polythiophene or graphite.
- 13. The method of claim 12 wherein the one or more of polyaniline, polyacetylene, polypyrrole or polythiophene are substituted.
 - 14. The method of claim 8 wherein the apertures are less than or equal to 5 μ m.
- 15. The method of claim 8 wherein the metal is selected from one or more of copper, nickel, aluminum, tin, lead or tungsten.
- 16. The method of claim 8 wherein the metal electroplating bath comprises an acidic electrolyte.
- 17. A method for manufacturing an electronic device comprising the steps of: disposing on an electronic device substrate having a non-conductive layer and apertures of $\leq 1~\mu m$ a layer comprising one or more conductive polymers; contacting the substrate with a metal electroplating bath; and subjecting the substrate to a current density for a period of time sufficient to deposit a metal layer on the conductive layer.
- 18. The method of claim 17 wherein the non-conductive layer is selected from a dielectric layer or a barrier layer.
- 19. The method of claim 18 wherein the dielectric layer comprises one or more of silicon dioxide, fluorinated silicon dioxide, organopolysilica materials, or organic dielectric materials.
- 20. The method of claim 18 wherein the barrier layer is selected from tantalum, tantalum nitride, titanium, titanium nitride, tungsten, tungsten nitride, molybdenum, molybdenum nitride, cobalt or cobalt nitride.
- 21. The method of claim 17 wherein the one or more conductive polymers are selected from polyaniline, polyacetylene, polypyrrole, polythiophene or graphite.
- 22. The method of claim 21 wherein the one or more of polyaniline, polyacetylene, polypyrrole or polythiophene are substituted.
 - 23. The method of claim 17 wherein the apertures are less than or equal to 5 μ m.



- 24. The method of claim 17 wherein the metal is selected from one or more of copper, nickel, aluminum, tin, lead or tungsten.
- 25. The method of claim 17 wherein the metal electroplating bath comprises an acidic electrolyte.
 - 26. The method of claim 17 wherein the electronic device is an integrated circuit.
- 27. A method of enhancing a seed layer comprising the steps of: contacting a substrate having a discontinuous seed layer with one or more conductive polymers to provide a substantially continuous seed layer.
- 28. The method of claim 27 wherein the non-conductive layer is selected from a dielectric layer or a barrier layer.
- 29. The method of claim 28 wherein the dielectric layer comprises one or more of silicon dioxide, fluorinated silicon dioxide, organopolysilica materials, or organic dielectric materials.
- 30. The method of claim 28 wherein the barrier layer is selected from tantalum, tantalum nitride, titanium, titanium nitride, tungsten, tungsten nitride, molybdenum, molybdenum nitride, cobalt or cobalt nitride.
- 31. The method of claim 27 wherein the one or more conductive polymers are selected from polyaniline, polyacetylene, polypyrrole, polythiophene or graphite.
- 32. The method of claim 31 wherein the one or more of polyaniline, polyacetylene, polypyrrole or polythiophene are substituted.
 - 33. The method of claim 27 wherein the apertures are less than or equal to 5 μ m.
- 34. An electronic device substrate having apertures of $\leq 1~\mu m$ and having a substantially continuous seed layer comprising one or more conductive polymers.